



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,625	02/04/2005	Martin Sandal Nielsen	PGR-5-PCT-US	2998

22827 7590 03/06/2007
DORITY & MANNING, P.A.
POST OFFICE BOX 1449
GREENVILLE, SC 29602-1449

EXAMINER

NGUYEN, SIMON

ART UNIT	PAPER NUMBER
----------	--------------

2618

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/500,625

Applicant(s)

NIELSEN ET AL.

Examiner

SIMON D. NGUYEN

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 June 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The subject matter of this application admits of illustration by a drawing to facilitate understanding of the invention. Applicant is required to furnish a drawing under 37 CFR 1.81(c).

The drawings are objected to because they fail to label (or name) components for one to understand what the components about. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claim 8 is objected to because of the following informalities: "... sad the response signal..." is a typing error. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-20, 22-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Frank et al. (6,026,150).

Regarding claim 1, Frank discloses method and system for transmitting a control signal to controllable nodes associated with devices (#11-18), the controllable node linked to at least one other node via a communication bus (telephone line 2) (fig.1), comprising: a) transmitting a signal from a controller (remote control) using a radio frequency transmission (a remote control transmits a signal to a first wireless consumer device (abstract, fig.2, column 3 line 66 to column 4 line 5), b) receiving the transmission signal by a node having a radio frequency receiving configuration (abstract, column 3 line 66 to column 4 line 5); c) detecting at least part of the transmission signal indicating a destination node (column 3 lines 1-10, column 10 lines 6-15, fig.5), and d) retransmitting at least a part of the transmission signal by the node having the radio frequency receiving configuration to the destination node via the communication bus (abstract, column 4 lines 19-23).

Regarding claim 9, this claim is rejected for the same reason as set forth in claim 1 as apparatus.

Regarding claim 22, this claim is rejected for the same reason as set forth in claim 1, wherein Frank further discloses the controllable node detects a destination signal embedded in the electromagnetic signal (a wireless/infra-red signal or a burst signal), wherein the destination node associated with the controllable device (figs.1-2, column 3 lines 17-31, column 3 line 66 to column 4 line 25, column 10 lines 10-11, 28-29, 54-58) and the destination node transmits a response signal (column 4 lines 1-25, column 11 line 38 to column 12 line 17).

Regarding claims 2-3, 28, Frank further discloses determining a timeslot in which the retransmitting step is performed by the node having the radio frequency receiving configuration, and wherein the time slot is randomly selected (column 9 lines 21-61).

Regarding claims 4, Frank further discloses wherein the transmission signal is received by at least two nodes having respective radio frequency receiving configurations and the retransmitting step is performed only by the node for which an earliest occurring timeslot has been selected (figs. 1-2).

Regarding claims 5, 11, Frank further discloses wherein at least part of the transmission signal indicating the destination node includes an identification of the destination node (column 10 lines 7-11, fig.5).

Regarding claims 6, 14, Frank further discloses wherein the retransmitting step is performed by a wired communication bus (telephone line) (fig.1).

Regarding claims 7,13, 23, Frank further discloses wherein the transmitting step is performed by a wireless radio frequency remote control (#20 of fig.1, abstract, column 3 lines 1-10).

Regarding claims 8, 19, Frank further discloses transmitting a response signal from the destination node, said the response signal including one of an acknowledgement, a request, a measured value or combinations thereof, and routing the response signal corresponding to a routing of the transmission signal (column 3 lines 3-5, column 11 lines 4-13).

Regarding claim 10, Frank further discloses a plurality of the nodes in the form of controllable units each associated with respective devices (11, 12, 13-18), and at least

one communication bus (telephone line 2), the communication bus defining the system and being linked to at least one of the nodes configured to receive the signal and wherein transmission of signals to or from the subnet is performed by means for transmitting a radio frequency. It should be noted that all controllable devices 11-18 formed as a loop or a subnet (figs. 1-2).

Regarding claim 12, Frank further discloses wireless receiver 103(fig.2) receiving wireless control signals generated by remote control 20. In response to the wireless control signal, wireless receiver 103 transmits the control signal to the controllable devices (column 3 line 66 to column 4 line 5), which means the wireless receiver initiating a retransmitting signal to a controllable device after receiving the control signal from the remote control.

Regarding claim 15, Frank further discloses storing IDs of destination nodes (column 10 line 62).

Regarding claim 16, Frank further discloses a power supply (column 3 lines 22-23).

Regarding claim 17, Frank further discloses modulating signal (fig.3).

Regarding claim 18, Frank further discloses control means for controlling operations (fig.2, column 3 lines 48-65).

Regarding claims 20, 27, Frank further discloses the identification of the destination node is an address (column 10 lines 9-10).

Regarding claim 24, Frank further discloses the controllable device and the controller (fig.2) are hard-wired (telephone line) to the nodes (fig.1-2, column 3 line48-52).

Regarding claim 25, Frank further discloses the plurality of controllable devices (11-18 of fig.1) are controlled by a destination signal designated to a specific controllable device for control (fig.2, column 3 line 17 to column 4 line58, column 11 line 14 to column 12 line 18).

Regarding claim 26, Frank further discloses use a predefined time-slots (fixed timeslots) (column 9 line 55).

Regarding claim 29, Frank further discloses a control signal to control the controllable device (fig.2, column 3 lines 61-65).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Frank et al. (6,026,150).

Regarding claim 21, Frank discloses the system and method consisting of a control signal (column 11 lines 38-54, fig.1), a request signal (column 11 line 5).

However, Frank does not specifically disclose an interrogation signal.

Art Unit: 2618

It should be noted Frank teaches the remote controller 20 generating a control signal, wherein the control signal impeded with the destination address of one of the controllable units 11-18. Whenever, a controllable unit receives the destination address corresponding to its address, it will respond to the control signal (fig.1, column 1 line 66 to column 2 line 8, column 3 line 66 to column 4 line 5, column 11 lines 25 to column 12 line 17), which is obviously the control signal is an interrogation signal.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Simon Nguyen whose telephone number is (571) 272-7894. The examiner can normally be reached on Monday-Friday from 7:00 AM to 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward F. Urban, can be reached on (571) 272-7899.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 306-0377.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

600 Dulany, Alexandria, VA 22314

Or faxed to:

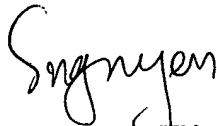
(571) 273-8300 (for formal communications intended for entry)

Art Unit: 2618

Hand-delivered response should be brought to Customer Service Window
located at the Randolph Building, 401 Dulany, Alexandria, VA, 22314.

Simon Nguyen

February 21, 2007

A handwritten signature in cursive script, appearing to read 'S. Nguyen'.

SIMON NGUYEN
PRIMARY EXAMINER